

*A demonstration underway in Connecticut is proving the value of voluntary consultation as a means of upgrading the standards of community hospitals.*

## A Project in Voluntary Consultation for Hospitals

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IN 1955, leaders of the Connecticut Hospital Association felt that a need existed among their 33 short-term, member hospitals for guidance in dietary and personnel practices. An application was submitted to the Public Health Service requesting a grant whereby two specialists could be added to the staff of the association to provide voluntary consultation services to member hospitals.

The application stated, "There exists today a hiatus in most parts of the country between the recommendations of the experts and the actual operation in the individual hospitals. Most hospitals are small and cannot afford highly trained department heads or experts in all fields to take advantage of the many recommendations. This is particularly true in personnel and dietetics." The application further stated, "The value would be measured not only by improved personnel and dietary practices, but also through financial savings in the individual hospitals."

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A 2-year grant was awarded in April 1956, and, based on initial results of the project, a 1-year extension was approved. The association is studying the possibility of financing the program on its own on a permanent basis.

Consultation services, as such, are not new. In hospital administration alone consultants flourish on a fee-for-service basis in many fields, including architecture, dietetics, fund raising, public relations, personnel, and accounting. These private consultants may have difficulty in obtaining clients. Once they have a contract in hand, however, they gain psychological advantage over the client, who is anxious to justify expense by obtaining value in return.

A similar receptivity is enjoyed by another type of consultant, the specialist working under the auspices of governmental regulatory agencies. When consultation is coupled with licensing, there is an implied sanction that would seem to give the consultant some advantage in acceptance.

Voluntary consultation, lacking both the financial involvement of the client and the sanction of licensing, is acutely dependent upon the effectiveness of the consultant and the degree of the client's need. This potential weakness of the project was recognized by the association at the outset.

A retrospective evaluation of the first 18 months of the dietary phase of the two-part

project was undertaken as an academic project by the senior author, a student in the course in hospital administration of the department of health, Yale University. The final report records notable gains in a majority of the hospitals. The achievements indicate that voluntary consultation can be effective when properly organized and conducted.

### **Start of the Project**

As the food service specialist, the Connecticut Hospital Association selected a member of the American Dietetic Association who had been food service director with the Maryland State Department of Health. Her services began in September 1956 with a "get acquainted" visit to each of the 33 hospitals and a survey of the quality of their dietary programs.

To provide a frame of reference for the project, the sponsors selected the "checksheet for the hospital department of dietetics," devised by the American Dietetic Association. The checksheet, considered a summation of essential criteria, represented exhaustive study and research by a special committee of the association beginning in 1954.

The checksheet represented 51 items divided into 6 main categories of dietetic administration. The six areas of special interest but of varying degrees of relative importance were organization, facilities, personnel, records, management policies, and conferences.

Items related to organization were designed to evaluate the qualifications of the dietitian and the effectiveness of supervision. Sample questions were: Is there a written organization plan designating areas of authority? Is supervision designated for all working hours?

Regarding facilities, the items recorded the way the food was received, stored, prepared, cooked, and served. Dishwashing and disposal equipment and methods were judged as well as the adequacy of the size of dining areas and communication equipment.

Questions on personnel determined, for example, whether the department was subject to a labor-hour budget, whether the nonprofessional personnel assignments were evaluated periodically to assure sufficient employees, and whether there was an adequate number of stenographers and clerks so that professional staff

time was not used for these duties. The application of an employee merit-rating system was also checked.

The items on records asked about the accessibility of pertinent records and checked practices in accounts and inventory recordings. The following were representative queries: Is a record of all menus, as served, filed for a reasonable time? Are regular and modified menus checked for nutritional adequacy and patient acceptance? As an alternative to a perpetual inventory system, is an adequate inventory of another type maintained? Has the dietitian access to medical charts?

Sample questions under management policies asked the following: Are all patients on routine and modified diets visited at frequent intervals? Do you use written communications to make suggestions, to confirm oral discussions and decisions, to present reports, and as reminders?

The conference group of items measured the level of communications and cooperation among the dietetic, administrative, and medical staffs of the hospital. The following questions were representative: Does the dietitian in charge of the department of dietetics attend the administrator's conferences? Are staff conferences for the department of dietetics held periodically?

Subsequent to the Connecticut hospital study, the checksheet was expanded and refined to increase its utility as a measurement tool for dietary consultant services on a continuing basis.

The 33 hospitals were grouped by size because of the wide range in number of beds (and thereby of financial structure). The size ranged from more than 700 to fewer than 40 beds. The four categories established were class I, with 300 or more beds, 9 hospitals; class II, 200 to 300 beds, 6 hospitals; class III, 100 to 200 beds, 10 hospitals; and class IV, 99 or fewer beds, 8 hospitals.

### **Initial Survey Results**

The initial survey in 1956 disclosed a wide range of compliance with the 51 individual items among Connecticut hospitals, from a low of 14 "right answers" for one to a high of 47 for another. The mean score was 31.9 and the median 31.

Of the 51 individual standards on the check-sheet, only 3 items were complied with by all the hospitals. All hospitals met the requirement that modified, therapeutic diets be ordered in writing by the physician, and that available funds be provided for nutritionally adequate meals.

At the same time, not one of the 33 hospitals met the ADA standard specifying that the dietitian write comments on the patient's medical chart, obviously a matter of regional medical practice of long standing. Only 24 percent of the hospitals were conducting adequate inservice training.

The class III hospitals were notably low in organization and personnel practices. But they ranked high in facilities and conferences, and ranked well in the remaining categories. These differences seem significant. One can understand relatively low ratings in staffing for the two groups of smaller hospitals, since qualified dietitians are a requirement. Few of these, one can speculate, have been able to obtain or afford dietitians. Funds alone do not explain the deficiencies in the smaller hospitals, however, as demonstrated in the relatively high standing of these groups in facilities where they exceeded the scores of the class II hospitals. The class II group was especially interesting; while ranking high with class I in staffing, it fell below norms in other areas. It should be noted here, however, that this group's deficiency in facilities was already being attacked through a number of building or remodeling programs to which they were committed in the fall of 1956.

Averages are useful as an indication of general patterns, but can hide wide variations within a group, and this is true of the arbitrary groupings that have been used. Class I and class II hospitals in particular ranged widely in their total scores on the checksheet completed by the specialist in her early visits. While two class I hospitals ranked high, with 47 of a possible 51 points, one hospital in the group ranked with the lowest with only 20 total points. A hospital in class II had the lowest total score of all 33 hospitals, a total of only 14 points of compliance.

In addition to observing checksheet phases of dietary operation, the specialist found that other dietary problems existed in enough of the

hospitals to make additional goals important. Such a problem was scheduling of the patient's meals. One criterion of hospital care applies to the minimizing of the inevitably large number of adjustments a patient must make as he enters the hospital world. The average patient might be expected to complain when he finds breakfast arriving between 6:30 and 7:00 a.m., a heavy meal arriving at 11:30 a.m., and a light "supper" arriving at 4:00 or 4:30 p.m. Schedules such as this were all too common.

Sanitation and housekeeping were covered by the checksheet, and the specialist was struck by the severity of some of the problems in this area. Several problems were architectural, but the majority were the result of attitude. Compounding the difficulties was the fact that few cities provided really close inspection by sanitarians. The overall average compliance of 48 percent with the item on regular inspection by a sanitarian seems somewhat inflated when it is recognized that once-a-year inspections were accepted as the norm by the specialist. Most would argue that regular inspection at least twice a year plus in-between "drop-ins" should be a minimum. Such standards were, however, typical of the Connecticut communities as she found them. At one large teaching hospital the specialist found a model purchasing procedure for canned foods. Purchasing was based on carefully prepared specifications, bidding was competitive, and sample cans were "cut" and evaluated for color, flavor, composition, and other criteria under carefully controlled conditions. Contrasted with this model system for assuring both quality and maximum use of the available food dollars, few hospitals were using competitive purchasing for either quality or cost control. This, therefore, became another area of concentration and subsequent service.

The checksheet covered standardized cost accounting for food only in general terms. This became still another area of effort, in which the specialist was aided by the Connecticut Hospital Association's accounting specialist throughout the study.

In summation, a wide variance in compliance with standards of the American Dietetic Association was found in Connecticut hospitals.

In general, larger hospitals ranked more favorably than the smaller hospitals, but this was not true in all cases for all criteria. Conditions were not "bad," but it was clear not only to the food service specialist but also to others associated with her that the original premise of the application had been valid. The administrator of one hospital, a member of the project committee, commented: "I was appalled to think that some of the things I have heard about could exist in our hospitals." Not all conditions were appalling, but certainly the survey confirmed the need expressed in the original application for improved dietary administration. The challenge and the opportunity to improve conditions were clear.

### Consultation Methods

A consultant in a field such as dietetics can approach a client with either of two basic methods: with a "package program" for the client to accept or reject, or with an open mind for the client's interpretation of his needs and an attempt thereupon to find solutions tailored to his situation. The latter method is more passive and also meets the accepted criterion of teaching—that people learn more readily when they are participants in selecting the topic. It also places greater demands upon the consultant's adaptability and professional skills, although most consultants will tend to combine both methods in varying degrees. It was the second approach that primarily characterized the consultations provided by the dietary project.

Working both with the administrator and the dietitian of the hospital, the food service specialist made a total of 290 consultation visits. This averaged four per working week, and when travel time is included each visit took the better part of a working day.

Training conferences for the dissemination of new methods and for the sharing of solutions to problems was, from the beginning, one of the expectations of the sponsors. Five state-wide meetings, one of these lasting an entire working week, and 14 regional meetings were held during the 18 months.

As the specialist became increasingly involved in the need for inservice training, in addition to conducting 15 demonstration train-

ing sessions, she prepared a series of training guides which were distributed to all member hospitals. These guides were also published in the *Modern Hospital*, May 1958.

From the outset, a written report was maintained on activities and progress. Also, a detailed narrative report summarizing each consultation visit was made part of the association's permanent file.

Further demands upon the food service specialist came not only from her professional affiliations but from a variety of State groups. Demonstrating the latent demand for guidance in this professional area, these requests were for consultations with special hospitals affiliated with the Connecticut Hospital Association, with State institutions, and with nursing homes.

Other unanticipated functions which took on increasing importance as the various hospitals gained confidence in the service offered were those of architectural consultation and equipment planning. Ambitious building programs of the hospitals created the need for the specialist's professional guidance that administrators found useful over and above the advice of architects and even of paid food service consultants. In one notable case, the dietary specialist reduced a hospital's equipment costs for a new kitchen by about \$75,000.

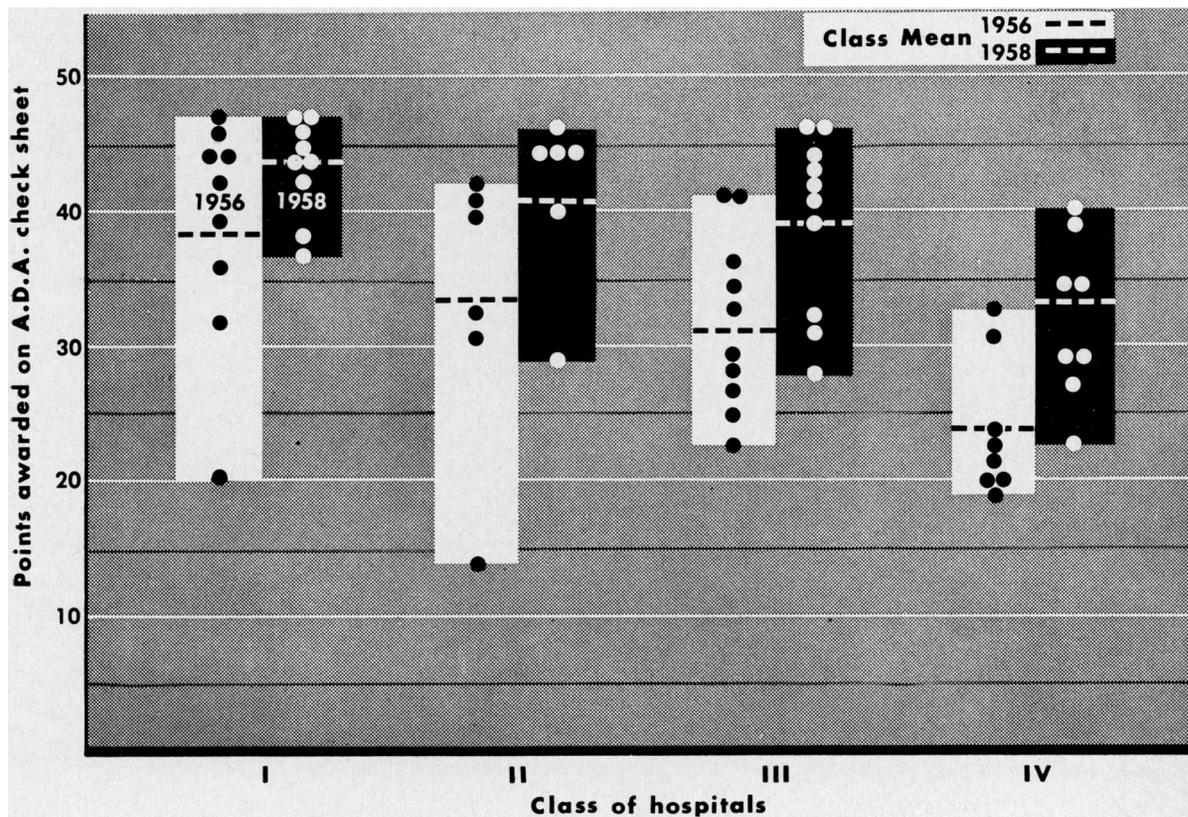
### Resurvey Results

The resurvey of the hospitals at the end of the first 18 months of the dietary project showed an upward shift of standings. From an overall compliance of 62 percent in 1956, the mean for the 33 hospitals climbed to 76 percent in early 1958. Only 1 of the 33 hospitals failed to improve its score, a class I hospital with a near-perfect score of 92 percent in the first survey. The range in raw scores which had covered 65 percent of the scale in 1956 decreased to 46 percent in 1958 (fig. 1).

The mean scores of the hospital classes increased from 38.8 to 43.3 in class I; from 33.2 to 41.2 in class II; from 31.7 to 39.2 in class III; and from 23.5 to 32.1 in class IV. As expected by the sponsors, the largest proportional gains occurred among the smaller hospitals.

Gains were also made in each of the special areas in every hospital class.

**Figure 1. Comparison of raw scores<sup>1</sup> in initial survey (1956) and in followup survey (March 1958) made by 33 member hospitals of the Connecticut Hospital Association.**



<sup>1</sup> Ratings by dietary specialist.

A major item under staffing is the requirement that the hospital dietary department be headed by a qualified dietitian. The fact that this was unchanged quantitatively during the study period (15 of the 33 hospitals met the requirement) does not reflect the extent to which the dietary consultant helped recruit dietary personnel. Three qualified dietitians were recruited to replace head dietitians who resigned during the period, and 12 subordinate dietary supervisors were found. Other improvements in the category of organization brought the score for this area from 49 to 65 percent despite the lack of change in the one requirement.

Gains noted in the other areas were facilities, 62 to 84 percent; personnel, 52 to 71 percent; records, 70 to 81 percent; management, 65 to 73 percent; and conferences, 62 to 69 percent.

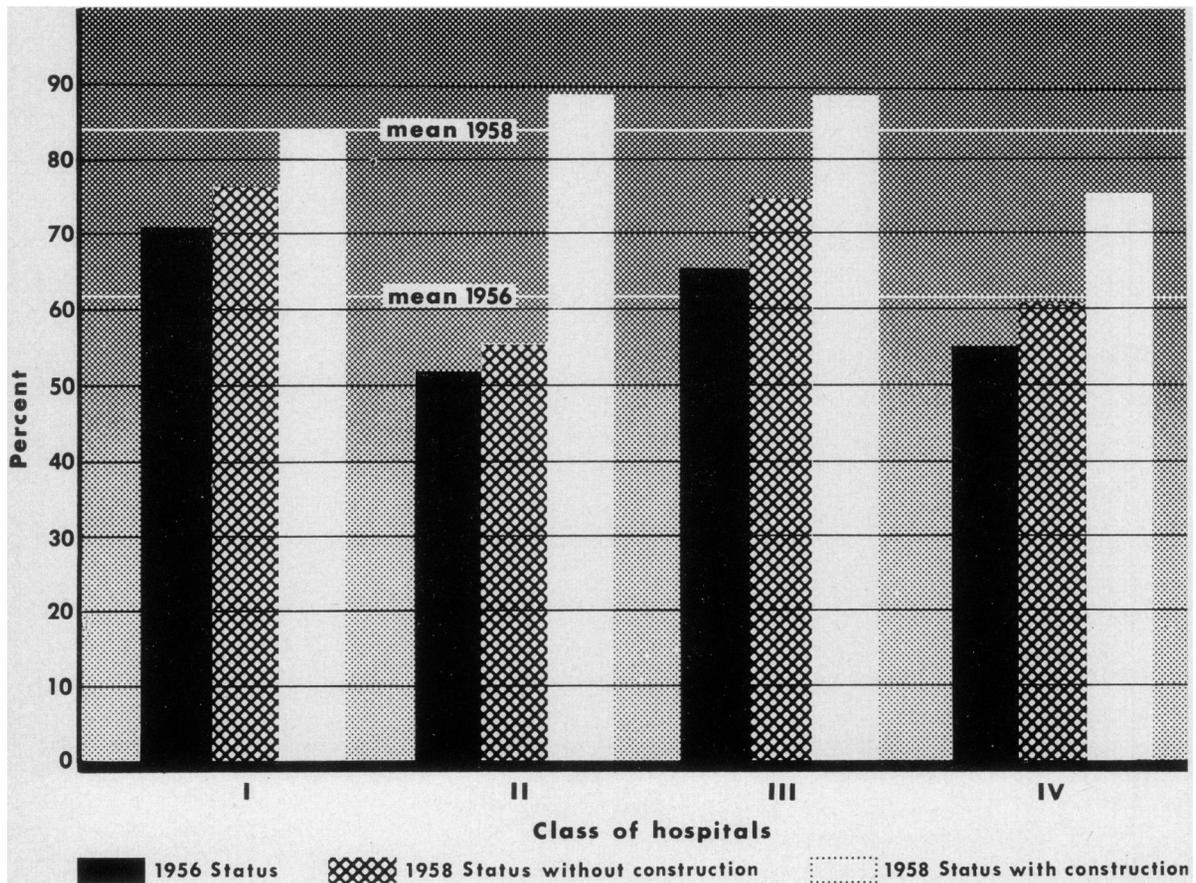
Several hospitals at the end of the report period had greatly improved the scheduling of meals for patients so that there is no more

than 14 hours between the serving of the evening meal and breakfast. Notable throughout the State were the generally higher levels of housekeeping and sanitation. These resulted from the direct consultations and inspections by the specialist, and particularly from the in-service training programs which were developed by many of the hospitals based on the training outlines the specialist had prepared and published.

In cooperation with the hospital association's accounting specialist, a monthly food cost analysis report was developed. By the end of the report period the majority of larger hospitals in the State were submitting these reports. The reporting required standardization of food cost accounting practices in these hospitals, which in turn reflected the increasing awareness of the importance of controlling food cost.

In one hospital, the specialist found that al-

**Figure 2. Comparison of percentage compliance by hospital classes with checksheet standards for facilities for 1956 and for March 1958.**



though the dietary department maintained high food standards, the actual responsibility for preparing and serving breakfast rested with the housekeeping department, which served the noon and evening trays prepared by the dietary department. After a man-hours study, this hospital was able to revise the entire system, so that the full responsibility rested with the dietary department, at no increased cost in personnel. It is generally accepted that there is a particular advantage in placing full responsibility on the dietary department for the condition of the food as it reaches the patient. Similar special studies were conducted in other hospitals, to the same end, and in addition in-service training and regional educational programs all helped instill in the dietary personnel increased awareness of the importance of not only preparing the food well, but of serving it attractively.

Although direct cause and effect relationships between the dietary project and these improvements cannot be proved, the consistency of the changes suggests more than circumstantial evidence of the program's value. Other influences cannot be denied. All hospital administrators are subject to constant pressure to improve services. Certainly, a constant barrage of ideas in all aspects of hospital administration is presented by a variety of publications and professional associations. Many of these influences had existed long before the dietary project but did not obtain wide acceptance in the area until this individual consultation service program began.

In one specific area, however, a clear bias in the results is evident. This was in the improvement of facilities. The largest gains were noted here. It is necessary to recognize the effect of hospital construction projects which

were, in 1956-57, at a peak in Connecticut as the result of the Hill-Burton program and, to a lesser extent, the hospital grants of the Ford Foundation. Eight of the 33 hospitals were already committed to major reconstruction or expansion at the outset of the dietary project.

In an effort to arrive at a more direct relationship between the dietary project and improved facilities, figure 2 shows three values: the 1956 compliance with facilities criteria, the gross compliance in the 1958 survey, and a "without construction" score for 1958 from which the more obvious effects of capital improvement have been deleted. While smaller, the gains again occur consistently in each hospital class.

### Acceptance of the Specialist

Fully aware of the need to establish acceptance, the specialist made clear to each administrator that her services were available. There was wide variation in the response.

At the various educational conferences, a total of 546 persons attended. They included 90 administrators in addition to the dietary personnel. All hospitals were represented in at least one of these meetings and 80 percent of class I hospitals participated in the statewide meetings. The larger hospitals, however, were represented by more people than the smaller at these conferences. The smaller hospitals, on the other hand, were less apt to have professional dietitians and proved therefore to be the most responsive to professional guidance. The hospitals with building programs made the greatest demand for equipment and layout advice.

The relationship between the specialist and the administrators reflected a wide range of attitudes on the part of the administrators. There were those who were unwilling to acknowledge any problems, those who requested advice but were unable to apply it, and still others who were receptive to advice and effective in putting guidance into practice.

### A Case in Point

An idealization of effective consultation is the experience with a 70-bed hospital, where much

was achieved and credited by the administrator to the specialist.

In addition to improving dietary services, a major hope of the sponsors had been to reduce dietary costs. In this hospital, the adoption of controls and rescheduling of personnel brought these financial changes:

Year ending	Salary and wages	Supplies and expenses	Total
September 1956-----	\$38, 322	\$38, 682	\$77, 004
September 1957-----	34, 662	30, 983	65, 645
Reduction-----	3, 660	7, 699	11, 359

Significantly, this hospital was the only one of the 33 to reduce the total costs per patient-day during the years in question. The reduction was about equal to the amount saved in the dietary department. Unquestionably, inefficiency had existed there before, but it was the specialist who brought it to the attention of the administrator and showed him ways to correct his problems.

In the period under survey, this hospital (*a*) adopted a written organization plan designating supervisory responsibilities; (*b*) rearranged storage space; (*c*) obtained more efficient kitchen equipment; (*d*) improved dishwashing procedures; (*e*) instituted systematic equipment maintenance and replacement; (*f*) placed the dietary department on a budget; (*g*) adopted new menus for improved nutrition and patients' acceptance; (*h*) began nutritional education for patients; (*i*) provided a food preference system for each patient; and (*j*) adopted inventory controls.

### Success Factors

The Connecticut demonstration has more than met the expectations of its sponsors. Although not every one of the member hospitals made maximum use of the proffered services, requests for service from member hospitals have accelerated beyond the heavy demand of the first 18 months. What are the factors that made the program work?

*Qualifications of the food service specialist.* Voluntary consultation places heavy importance on the ability of the consultant to obtain the respect of both professional peers (in this case, dietitians) and of business-oriented administrators. At the cost of a 5-month delay,

the Connecticut program was allowed to begin only after the sponsors were satisfied that they had found a consultant with the right personal and professional qualifications.

*Existence of real need.* Stimulus for the Connecticut project was the increasing participation of food management firms in hospital dietary programs. The fact that such firms could move into an area of hospital administration and demonstrate economic savings in spite of their fees signaled the existence of inefficiencies that needed correction. The fact that fewer than half of the Connecticut hospitals had been able to obtain professional direction for their dietary departments was a further clue to the potential value of a program that could be considered a sharing of professional knowledge and skills.

*Acceptance of consultation.* An accounting consultation service instituted by the hospital association in 1948 was a great advantage to the Connecticut program. This had led to a highly satisfactory program of uniform hospital accounting from which all hospitals had benefited. The success of this project had prepared the ground for acceptance of other consultation services.

*Geographic accessibility.* It is recognized that Connecticut offers a compact geographic pattern within which a program such as this could operate under near ideal conditions.

There is a real question as to whether a consultant could cover a larger area. Certainly, 33 hospitals are a maximum caseload. This suggests that in larger States regional hospital councils would offer an appropriate center for such a service.

### **Summary**

To make available professional guidance in the areas of dietary and personnel administration to its 33 member general hospitals, the Connecticut Hospital Association was granted funds by the Public Health Service for a demonstration program. Based on initial results, a year's extension to August 1959 has been granted. The association is now studying the possibility of financing the program thereafter on its own.

With the services of a food service specialist, the program resulted in a variety of training conferences throughout the State, the recruiting of professional personnel, guidance to hospitals in new construction and equipment purchasing, and a marked upgrading of standards.

The results of the program would seem to demonstrate that consultation on a voluntary basis is at least as effective as consultation services by State agencies and by fee-for-service firms. Such consultation would seem, furthermore, to be a valid function of the State or regional hospital association.

## **PHS Nursing Research Program Expanded**

The extramural nursing research program of the Public Health Service will be expanded by six new grants and support continued for three projects now underway.

Improved patient care through studies of nursing practice, nursing education, administration of nursing services, and other factors affecting the welfare of patients is the objective of the program, which was instituted in 1955.

The project sites of the six newly approved grants are Cornell University, University of California Medical Centers at Los Angeles and at San Francisco, University of Utah, and Western Interstate Commission on Higher Education, Boulder, Colo.

Grants for nursing research are administered by the Division of Nursing Resources in cooperation with the Division of General Medical Sciences of the National Institutes of Health.